REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 21-24 and 27-29 are pending in this application. Claims 21-24 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,492,633 to Nakazawa et al. (herein "Nakazawa") in view of U.S. patent 4,918,262 to Flowers et al. (herein "Flowers") and U.S. patent 6,225,986 to Sato et al. (herein "Sato"). Claims 27-39 were rejected 35 U.S.C. § 103(a) as unpatentable over Nakazawa, Flowers, and Sato as applied to claims 21-24 and in view of JP 09319501 to Fumihiko et al. (herein "Fumihiko").

Addressing the above-noted rejections, those rejections are traversed by the present response.

Applicants respectfully submit the outstanding rejections do not fully meet the limitations of the "second threshold value" recited in the claims.

One basis for the outstanding rejections recognizes that "Nakazawa et al. and Flowers et al. do not disclose the second threshold value being changed in accordance with a distance".[1] To overcome that recognized deficiency in Nakazawa and Flowers, the outstanding Office Action now cites Sato to teach "the second threshold value being changed in accordance with a distance (See Fig. 9, items 402-403, Col. 7, Lines 53-67)".[2]

Applicants respectfully submit that reliance on the teachings in Sato is improper as Sato does not disclose features corresponding to the claimed features.

Sato is directed to a coordinate input apparatus that utilizes a vibration input pen 3. Sato discloses use of both a window signal generator 35 and a level discriminator 40.

First, applicants note Sato discloses the use of a level discriminator 40 that has a threshold value that can change with respect to time, as discussed further below. However, applicants note a level threshold value set in level discriminator 40 does not correspond to the

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[1] Office Action of June 23, 2005, page 3, penultimate paragraph.
[2] Office Action of June 23, 2005, page 3, last paragraph.

same "second threshold value" as in the claims. The claims set forth a second threshold

value that is used to "calculate the coordinates" of insertion of a pointer. The discrimination

threshold value set in a level discriminator 40 in Sato does not have such an operation. Sato

specifically states "[t]he discrimination result by the level discriminator 40 is input as a

discrimination signal to the controller 1. In accordance with this discrimination signal, the

controller 1 changes a drive level (high or low level) of the pen 3".[3] Thus, in Sato the

discrimination threshold value of the level discriminator 40 is not used to calculate

coordinates of an inserted pointer, but instead is used to change a drive level of a pointer, i.e.

the pen 3. Thus, the entire reliance on the teachings in Sato is believed to be improper as it

references a threshold that is not even related to the claimed threshold.

Further, applicants respectfully submit Sato is even improper for the manner in which

it is applied as Sato does not change a threshold value based on a distance between a pointer

and an optical unit.

More particularly, independent claim 21 recites a feature of "said second threshold

value being changed in accordance with the ***distance between the pointer and the optical***

unit" (emphasis added).

According to the above-noted claim features, a value of a second threshold is changed

as the distance between a pointer and an optical unit changes, i.e. as a physical distance

changes. For example as discussed in the present specification, a value of a second threshold

can be set to decrease as the distance between an optical unit 5 and a designating device 4

increases, and as a specific non-limiting concrete example, a light receiving level of a light

receiving element 13 can be 10 (black) when the distance between the optical unit 5 and the

designating device is 100 mm and 200 when the distance is 200 mm.[4]

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[3] Sato at column 6, lines 1-5.
[4] See for example the present specification at page 19, line 12 *et seq.*

Thus, in the noted claimed features the value of the second threshold changes based on a physical distance between a pointer and optical unit.

The above-noted features differ from the teachings in <u>Sato</u>; the outstanding rejection appears to have misconstrued the teachings in <u>Sato</u> because <u>Sato</u> utilizes the word "distance". However, the use of the term "distance" in <u>Sato</u> is actually a *time* and is not a physical distance.

<u>Sato</u> specifically states:

> In this embodiment, the judgment threshold value and discrimination threshold value used by the window signal generator 35 and level discriminator 40 change as shown in FIG. 4 relative to the *time* lapse after the vibration input pen 3 is driven.[5]

<u>Sato</u> goes on to note that in the level discriminator 40 a threshold value can be changed "with a distance (time)".[6] Thus, the reference in <u>Sato</u> to determine "distance" at column 7, line 60 in fact is referring to how the threshold of the level discriminator changes relative to *time* as shown in Fig. 4. <u>Sato</u> does not disclose or suggest changing the discrimination threshold value and the level discriminator 40 based on the physical distance between the vibration pen and an optical unit.

In such ways, applicants respectfully submit <u>Sato</u> does not in fact overcome the recognized deficiencies of <u>Nakazawa</u> and <u>Flowers</u>, and that therefore the outstanding rejection is improper and must be withdrawn.

Moreover, applicants further respectfully submit the basis for the outstanding rejection is also improper in how it combines the teachings in <u>Nakazawa</u> and <u>Flowers</u>, and particularly how <u>Flowers</u> is cited to overcome the recognized deficiencies in <u>Nakazawa</u>.

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[5] <u>Sato</u> at column 7, lines 31-35 (emphasis added).
[6] <u>Sato</u> at column 7, line 60 (emphasis added).

The outstanding Office Action also recognizes deficiencies in <u>Nakazawa</u> and cites the teachings in <u>Flowers</u> to overcome certain of the recognized deficiencies in <u>Nakazawa</u>. Specifically, the outstanding Office Action states:

> Nakazawa et al. does not show optical unit recognize insertion of the pointer when detection signal exceeds a first predetermined threshold value, allowing a coordinate calculation operation.
>
> Flowers et al. teaches optical unit recognize insertion of the pointer when detection signal exceeds a first predetermined threshold value (See Fig. 5, item 1, Col. 8, Lines 7-16), allowing a coordinate calculation operation (See Fig. 5, item A, Col. 8, Lines 16-19 and Fig. 2, item 23).
>
> It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Flowers et al. into Nakazawa et al. system in order to utilize plural thresholds for tracking (see Col. 2, Lines 55-58 in the Flowers et al. reference).[7]

Thereby, the outstanding Office Action cites <u>Flowers</u> to teach an optical unit recognizing insertion of a pointer when a detection signal exceeds a first predetermined threshold.

In that respect, applicants note <u>Flowers</u> is directed to a touch sensing display apparatus that can correctly isolate touch forces imposed on a screen.[8] At the noted portion in <u>Flowers</u> at column 8, lines 7-19 <u>Flowers</u> discloses comparing a touch force on a screen with a static threshold level, and <u>Flowers</u> specifically discloses being able to set a threshold "to a force level which is less than that of the normally provided signal from the lightest human touch which is to be sensed".[9]

Thus, the Threshold level 1 in <u>Flowers</u> is not a level to detect insertion of a pointer. <u>Flowers</u> specifically notes such a level is below that for which a lightest human touch is to be sensed. <u>Flowers</u> also indicates such a sensing is utilized to acquire offset signal values for

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[7] Office Action of June 23, 2005, page 3, middle three paragraphs.
[8] See for examples <u>Flowers</u> at column 2, lines 29-35.
[9] <u>Flowers</u> at column 8, lines 14-16.

use in microprocessor 23.[10] Thus, <u>Flowers</u> does not disclose utilizing the Threshold 1 to determine insertion of a pointer.

Moreover, applicants note none of the applied art to <u>Sato</u>, <u>Flowers</u>, and <u>Nakazawa</u> disclose or suggest, in combination sensing both first and second thresholds. It is only the applicants of the present invention who recognized the benefits achieved in the claimed invention by utilizing both first and second threshold values. None of <u>Nakazawa, Flowers</u>, or <u>Sato</u> teaches or suggests such features.

Moreover, no teachings in <u>Fumihiko</u> are believed to overcome the above-noted deficiencies of <u>Nakazawa</u> in view of <u>Flowers</u>.

In view of these foregoing comments, applicant respectfully submit the claims as currently written distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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[10] <u>Flowers</u> at column 8, lines 16-19.